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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,493	06/02/2000	Hugh L. Brunk	60049	7276

23735 7590 11/17/2003

DIGIMARC CORPORATION
19801 SW 72ND AVENUE
SUITE 100
TUALATIN, OR 97062

EXAMINER

COLIN, CARL G

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 11/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/587,493

Applicant(s)

BRUNK, HUGH L.

Examiner

Carl Colin

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-- **Th MAILING DATE of this communication appears on the cover sheet with the correspond nce address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

1. Pursuant to USC 131, claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 2.1 **Claims 1-18** are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,535,617 to **Hannigan et al.**

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2.2 **As per claims 1 and 11, Hannigan et al.** discloses a method for reading a digital watermark in a media signal comprising: assigning sets of media signal samples into classes (see column 19, lines 65-69); computing a statistical distribution of the classes (see column 20, lines 1-24); and using the statistical distribution to detect or read a watermark in the media signal (see column 20, lines 33-35).

As per claim 2, Hannigan et al. discloses the limitation of wherein the media signal is an audio signal (see column 34, lines 14 et seq.).

As per claim 3, Hannigan et al. discloses the limitation of wherein the media signal is an image signal (column 19, line 20 et seq.).

As per claim 4, Hannigan et al. discloses the limitation of wherein the image samples are expressed in a frequency domain (see column 11, lines 35-67).

As per claim 5, Hannigan et al. discloses the limitation of wherein the image samples are spatial frequency coefficients (see column 11, lines 35-67).

As per claim 6, Hannigan et al. discloses the limitation of wherein the samples are in a spatial or temporal domain (see column 11, lines 35-67).

As per claim 7, Hannigan et al. discloses the limitation of wherein using the statistical distribution includes: assigning a figure of merit to a sample indicating a likelihood that the sample includes a recoverable portion of a watermark signal; and using the figure of merit in a read operation (see column 19, line 40 through column 20, line 35 see also columns 29-30).

As per claims 8 and 10, Hannigan et al. discloses the limitation of wherein assigning a figure of merit includes assigning a weight to the sample indicating an extent to which the sample is likely to reflect valid watermark data (see column 19, line 40 through column 20, line 35).

As per claim 9, Hannigan et al. discloses the limitation of wherein using the statistical distribution includes: assigning a figure of merit to a sample indicating a likelihood that the sample includes a recoverable portion of a watermark signal; and using the figure of merit in a watermark decoding operation (see column 7, lines 19-67).

As per claims 12 and 14, Hannigan et al. discloses a method for reading a digital watermark in an image comprising: assigning transformed samples of the image into classes (see column 8, line 64 through column 9, line 4); modeling a statistical distribution of the samples in each of the classes (column 9, lines 1-67); and using the statistical model to decode a watermark from the samples (see column 2, lines 12-29).

As per claim 13, Hannigan et al. discloses the limitation of wherein signal activity of the samples is evaluated and the samples are assigned to the classes based on signal activity (see column 10, lines 50-60).

As per claims 15 and 18, Hannigan et al. discloses a method for reading a digital watermark in a watermarked signal comprising: assigning sets of samples of the watermarked signal into classes (see columns 25-26); computing a statistical distribution of the samples in each of the sets (see columns 25-27); and using the statistical distribution to decode a watermark from the watermarked signal (see column 2, lines 12-29).

As per claim 16, Hannigan et al. discloses the limitation of wherein the sets of samples are assigned to classes based on a signal characteristic of the samples in the sets (see column 25, lines 5-9).

As per claim 17, Hannigan et al. discloses the limitation of wherein the signal characteristic is a measure of signal energy (see column 25, lines 1-9 see also column 28).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.1 **Claims 19-20** are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,748,763 to **Rhoads**.

3.2 **As per claims 19 and 20, Rhoads** discloses a method for estimating a watermark signal from a media signal suspected of containing the watermark signal, the method comprising: assigning samples of the suspect signal into classes based on a signal characteristic of the samples (column 19, line 45 through column 20, line 6); modeling distributions of the classes (column 19, line 45 through column 20, line 6); and estimating the watermark signal based on the suspect signal, the distributions of the classes, and a distribution of the watermark signal (see columns 19 et seq. see also columns 8-10).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. US Patent 5,809,455 Nishigushi et al.

This patent pertains to a method and system of discriminating a voiced sound from an unvoiced sound.

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4.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 703-305-0355. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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cc

Carl Colin

Patent Examiner

November 12, 2003

Guy J. Lamarre
for

Albert DeCady
Primary Examiner